IN THE CLAIMS:

Please add new Claims 64-68 as follows:

1. (Original) An image processing apparatus comprising:

image input means for inputting an image;

extraction means for extracting an outline of the image that has been input by said image input means;

vector generating means for generating vector information conforming to state of pixels neighboring each pixel constituting the output that has been extracted by said extraction means; and

embedding means for altering the image in accordance with watermark information and embedding the watermark information on the basis of the vector information.

2. (Original) The apparatus according to claim 1, wherein the vector information is 8-dimension vector information indicating whether there are eight pixels neighboring a pixel of interest.

3. (Original) An image processing method comprising:

an image input step of inputting an image;

an extraction step of extracting an outline of the image that has been input at said image input step;

a vector generating step of generating vector information conforming to state of pixels neighboring each pixel constituting the output that has been extracted at said extraction step; and

an embedding step of altering the image in accordance with watermark information and embedding the watermark information on the basis of the vector information.

4. (Original) The method according to claim 3, wherein the vector information is 8-dimension vector information indicating whether there are eight pixels neighboring a pixel of interest.

5.- 62. (Cancelled)

63. (Original) A computer-readable storage medium storing a program for executing an image processing method for processing an input image, said storage medium comprising:

a module for an image input step of inputting an image;

a module for an extraction step of extracting an outline of the image that has been input by the module for said image input step;

a module for a vector generating step of generating vector information conforming to state of pixels neighboring each pixel constituting the output that has been extracted by the module for said extraction step; and

a module for an embedding step of altering the image in accordance with watermark information and embedding the watermark information on the basis of the vector information.

64. (New) An image processing apparatus, comprising:

input means for inputting image data;

pattern obtaining means for obtaining pattern information including neighboring pixels of each pixel consisting of an outline of an image represented by the image data inputted by said input means, wherein the neighboring pixels include at least one pixel adjacent to a pixel of interest in each of horizontal, vertical and oblique directions of the pixel of interest; and

embedding means for embedding watermark information into the image data based on the pattern information, by modifying the image data in accordance with the watermark information.

65. (New) The apparatus according to claim 64, wherein the pattern information includes pixels of neighboring eight pixels of the pixel of interest.

66. (New) An image processing method, comprising the steps of:

inputting image data;

obtaining pattern information including neighboring pixels of each pixel consisting of an outline of an image represented by the image data inputted in said

inputting step, wherein the neighboring pixels include at least one pixel adjacent to a pixel of interest in each of horizontal, vertical and oblique directions of the pixel of interest; and

embedding watermark information into the image data based on the pattern information, by modifying the image data in accordance with the watermark information.

67. (New) The method according to claim 66, wherein the pattern information includes pixels of neighboring eight pixels of the pixel of interest.

68. (New) A computer-readable storage medium storing a program executing an image processing method according to claim 66.